

## EXECUTIVE SUMMARY

Prepared – February 14, 2003

<b>Mine Name:</b> Diamond Mountain Resources	<b>I.D. Number:</b> M/047/066
<b>Operator:</b> Deseret Generation and Transmission	<b>County:</b> Uintah
<b>Address:</b> 12500 E. 25500 S. Vernal, Utah 84078-8525	<b>New/Existing:</b> Status changing from Exploration to LMO
	<b>Mineral Ownership:</b> Federal (locatable mineral)
	<b>Surface Ownership:</b> Forest Service
<b>Telephone:</b> 435-781-5702	<b>Claim No.(s):</b> UMC 363617, 363618, 363624, and 363602
<b>Contact Person:</b> Jerry Hascall	<b>Permit Term:</b> Life of Mine

**Life of Mine:** 35 years

**Legal Description** SW¼ Sect. 15, SE¼ Sect. 16, NE¼ Sect. 21, and NW¼ Sect. 22, Township 1 South, Range 22 East, SLBM.

**Mineral(s) to be Mined:** Limestone

**Acres to be Disturbed:** 47.3 acres through the life of the mine

**Present Land Use:** Multiple use under Forest Service management: recreation, wildlife habitat, livestock grazing.

**Postmining Land Use:** Recreation, wildlife habitat, livestock grazing.

**Variances from Reclamation Standards (Rule R647) Granted:** None.

### Soils and Geology

**Soil Description:** The quantity of soil ranges from almost none on the ridgetop to about 40 feet in the small drainages to the east and west of the mine. There is up to 12 inches of topsoil in the draws. Dominant soils are classified as loamy-skeletal, mixed, Typic Argiborolls.

**pH:** About 7.0-7.5

**Special Handling Problems:** The operator intends to use an 18-acre borrow area from which to obtain about six inches of topsoil and 12 inches of subsoil for reclamation of ridges where there is very little soil available.

**Geology Description:** The operator is mining Mississippian-age limestone below which is the Lodore Formation of green shale and arkosic sandstone. Below this is the Uinta Mountain Group of Precambrian age arkosic and quartzitic sandstone greater than 12000 feet thick. The dip is to the south, and because the dip is steeper than the ground slope, one finds progressively younger formations in traveling to the south.

## **Hydrology**

**Ground Water Description:** The actual depth to ground water is not know, but, based on drilling for a water well, it is at least 1000 feet deep.

**Surface Water Description:** The mine is on a ridge with small ephemeral drainages on the east and west sides. These drain to Reader Creek which is about one-half mile south of the mine. Beginning at this confluence, Reader Creek is perennial. Although there are no known water quality samples of Reader Creek, the pH is expected to be neutral to slightly alkaline with relatively low values of total suspended solids and total dissolved solids.

**Water Monitoring Plan:** The operator does not plan to monitor water quality. No effects to ground water are anticipated, and the effects to surface water quality will be minimized by routing nearly all runoff from the mine to a non-discharging sediment pond.

## **Ecology**

**Vegetation Type(s); Dominant Species:** Dominant species in the mine area are bluebunch wheatgrass, black and mountain big sage, Utah serviceberry, alder-leaf mountain mahogany, western wheatgrass, and junegrass. Nearby areas also have clumps of aspen with some Douglas fir.

**Percent Surrounding Vegetative Cover:** Vegetation cover on the ridge line is estimated to be 17 percent. In the west swale, it was measured as 70 percent with 63 percent cover in the east swale.

**Wildlife Concerns:** No threatened or endangered species are known to occur in the area, and there should be minimal effects on threatened and endangered fish of the upper Colorado River basin. A few sensitive species and other species of concern, such as the sage grouse and northern goshawk, occur in the area, but impacts from the mine are expected to be minor.

**Surface Facilities:** Access is gained on Forest Development Road 048 to just above the mine site, then on a short section of permitted road. Most surface facilities are mobile, including the crushers, screens, conveyors, a storage trailer, fuel tanks, loaders, drilling equipment, and dozers. Non-mobile facilities include a sediment pond, the short piece of access road, water well, water tank, and water lines. All permitted facilities will be reclaimed, but Forest Development Road 048 will not be reclaimed.

## **Mining and Reclamation Plan Summary:**

### **During Operations:**

After stockpiling topsoil, the limestone will be shot in 35-foot lifts with resulting benches being 25 feet wide. The mined material will be hauled from the pit then crushed and screened. The operator anticipates mining about 30,000 to 75,000 cubic yards of ore with 5000 to 15,000 cubic yards of waste annually. The product will be delivered to the Bonanza Power Plant for emissions control, and waste rock will be used in road construction, lime chips, and in reclamation regrading. The operation will be limited to 9.64 acres of active disturbance with additional areas being in various stages of reclamation. Nearly all runoff from the mine will be contained within a

sedimentation pond. There will be restrictions on mining during certain times of the year to avoid conflict with recreationists.

**After Operations:**

All permitted surface facilities will be reclaimed. Slopes will be regraded to not exceed 3h:1v using waste as backfill material. Highwalls will be drilled and blasted to reduce the overall slope to 3h:1v. A minimum of 12 inches of subsoil and 6 inches of topsoil will be placed on the graded areas, and these areas will then be ripped 18 to 24 inches deep. An 18-acre borrow area will be used to obtain some of the soil needed for reclamation. The surface will be left rough then broadcast seeded with a mixture of 13 native species.

**Surety**

**Amount:** \$271,900

**Form:** unknown at this time

**Renewable Term:** 2007 dollars